

ABSTRACT OF THE DISCLOSURE

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The present invention provides a method and apparatus to determine the state of a communications link between two nodes in a network. Typically, each node will have an RTT-based value to use, a packets sent counter, and a threshold number to use against the packet sent counter to determine if there is a problem with their communications link. Using the RTT value makes the failure detection sensitive to the actual state of the communications link at any particular time; it also allows the failure detection algorithm to take into account the bursty nature of nodes in a packetized network connection. For each packet received from a non-local node, the local node sets the counter to 0 and starts a new RTT-based time interval. The local node then increments the counter only once, regardless of how many packets it sends to the non-local node, during the RTT-based time interval. Once the time interval is up, the counter is incremented for each packet sent. The counter is compared to the fixed threshold value to determine if it is likely a communications link failure has occurred.

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